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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,123	12/22/2000	Gerald B. Hoopes	68135486-200700	1042

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EXAMINER

NGUYEN, DANNY

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/747,123

Applicant(s)

HOOPES, GERALD B.

Examiner

Danny Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudhry (U.S. Patent No. 6,282,075).

Regarding to claim 1, Chaudhry discloses that the surge protector comprises a metal-oxide varistor (18) which has two electrodes, one electrode being connected to a power line (line 2); a gas-discharge tube (22) has a line electrode connected to other electrode of the metal-oxide varistor (also see fig. 1). Note that AC outlets are in various locations of the building including entrance of the building. It would have been obvious to one of ordinary skill in the art at the time the invention was made to realize that the circuit of Chaudhry can be used in any including the entrance of the building in order to protect a surge voltage appearing on power lines (Chaudhry, col. 1, lines 56-65). This is only an intended use of the surge protector. See *In re Casey*, 152, USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Regarding to claims 3 and 5, Chaudhry discloses that the surge protector comprises a first metal-oxide varistor (110) which has two electrodes, one electrode being connected to a first power line (line 2); a first gas-discharge tube (114) has a line electrode connected to other electrode of the first metal-oxide varistor and a ground

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electrode connected to a ground (prong AC plug 13); a second metal-oxide varistor (112) has two electrodes, one electrode being connected to a second power line (line 1); and a second gas-discharge tube (116) has a line electrode connected to other electrode of the second metal-oxide varistor and a ground electrode connected to a ground (prong AC plug 13) (also see fig. 3).

Regarding to claim 6, Chaudhry discloses that a capacitor is connected between the two power lines (104).

2. Claims 2, 4, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudhry in view of Kapp et. al. (U.S. Patent No. 5,412,526). Chaudhry discloses all limitations of claim 1 except for each of the metal-oxide varistor being connected as claimed. Kapp et. al. discloses each of the metal-oxide varistor (72,74) being connected to a power line (62, 64) through a series-fuse (66, 68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify each of the metal-oxide varistor being coupled to a power line through a series fuse of Chaudhry as taught by Kapp et. al. in order to limit surge currents flowing through the circuitry so that they are not damaged by surge (Kapp, col. 1, lines 49-50).

3. Claims 8, 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudhry in view of Stahl (U.S. Patent No. 5,388,021).

Regarding to claim 8 and 10, Chaudhry discloses that a first protector sub-circuit (MOV 110, GDT 114) is connected between a first power line (line 2) and a ground (see prong AC 13); a second protector sub-circuit (MOV 112, GDT 116) is connected between a second power line (line 1) and a ground (see prong AC 13). Chaudhry does

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does not disclose that each sub-circuit protector having two metal-oxide varistors ~~which~~
Q ~~is~~ connected as claimed. Stahl discloses each sub-circuit protector having two metal-oxide varistors (28, 29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the sub-circuit protectors of Chaudhry as taught by Stahl in order to provide a higher current carrying capacity and lower line voltage drop than one circuit operating individually (Stahl, col. 4, lines 13-22).

Regarding to claim 11, Chaudhry discloses that a capacitor is connected between the two power lines (104).

Regarding to claim 12, Chaudhry discloses that AC power surge protection of greater than 10 kilovolts open circuit and 40000 amperes short circuit (see col. 3, line 65 through col. 4, line 2).

Regarding to claim 13, Chaudhry discloses that the protector is located within 2 meters of the building (see col. 1, lines 61-65).

Regarding to claim 14, Chaudhry discloses that the inductance is less than 2.5 microhenries (col. 4, line 36).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Chaudhry (U.S. Patent No. 6,188,557), disclose that a surge protection circuit has a plurality of a metal-oxide varistor to prevent from the dangers associated with over-voltage conditions.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (703)-305-5988. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (703)-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-305-1341 for regular communications and (703)-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

D.N.

D.N.
July 23, 2002



7/24/02

KIM HUYNH
PRIMARY EXAMINER